



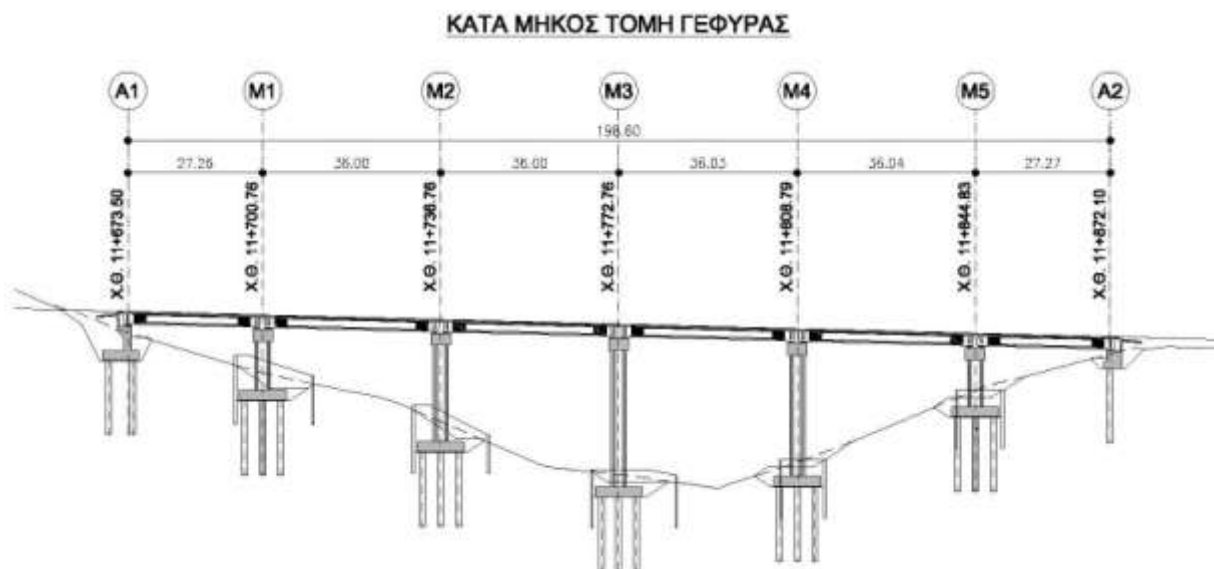
MINISTRY OF INFRASTRUCTURE, TRANSPORT AND NETWORKS

TRIPOLIS - VYTINA - ANCIENT OLYMPIA MOTORWAY - SECTION: DEVIATION OF LAGADIA

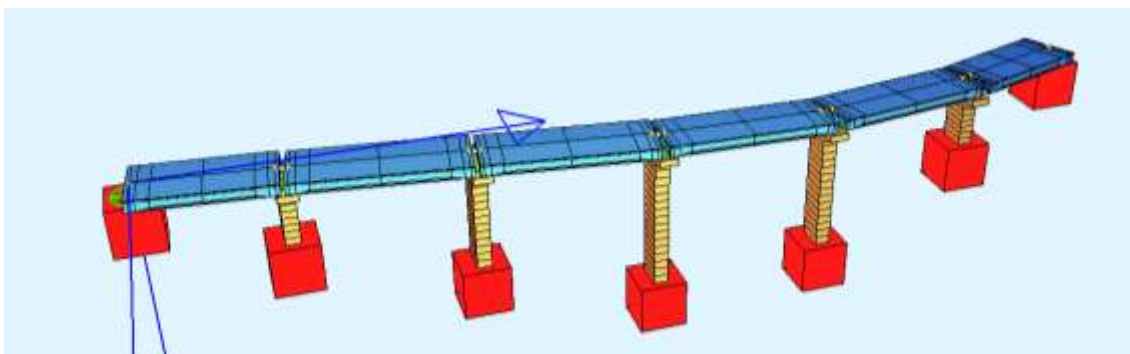
STRUCTURAL DESIGN: KANON CONSULTING – ANODOS (2012)

The section of Lagadia deviation of Tripolis-Vytina-Ancient Olympia Motorway, which is approximately 20km long, runs mostly through mountainous terrain and is comprised of multiple highway civil works. The major structures of this particular section are two tunnels, 350m and 250m long, nine bridges and a variety of minor structures such as culverts and retaining structures.

The bridges have a total length that varies from 55.0m to 250.0m, most of them are curved in plan, with a curvature radius of 200.0m, and their superstructure consists of a cast in situ, reinforced concrete slab and prefabricated prestressed (post tensioned) girders. Two types of beams have been utilized for the 14.0m wide bridge deck, a 27.5m and a 35.0m long beam. The beams are arranged at a spacing of 2.00m approximately and they rest on elastomeric bearings. The piers are made up of hollow rectangular cross-sections, have a height that varies from 10.0m to 28.0m and are founded via a grid of Φ 1.20 piles.



Longitudinal section of a six span bridge (Γ5)



Design model of Γ5 Bridge